

Title (en)

METHOD FOR THE ELECTRODEPOSITION OF A TIN-CONTAINING LAYER

Title (de)

VERFAHREN ZUR ELEKTROLYTISCHEN ABSCHIEDUNG EINER ZINNHALTIGEN SCHICHT

Title (fr)

MÉTHODE POUR L'ÉLECTRODÉPOSITION D'UNE COUCHE CONTENANT DE L'ÉTAIN

Publication

EP 2868778 B1 20230531 (EN)

Application

EP 14191883 A 20141105

Priority

US 201314071679 A 20131105

Abstract (en)

[origin: EP2868778A2] Tin electroplating baths having certain brightening agents and nonionic surfactants provide tin-containing solder deposits having good morphology, reduced void formation and improved within-die uniformity.

IPC 8 full level

H01L 23/00 (2006.01); **C25D 3/32** (2006.01); **C25D 3/60** (2006.01); **C25D 7/12** (2006.01); **H05K 3/34** (2006.01)

CPC (source: EP US)

C25D 3/32 (2013.01 - EP US); **C25D 3/60** (2013.01 - EP US); **C25D 7/123** (2013.01 - EP US); **H01L 24/11** (2013.01 - EP US); **H01L 24/05** (2013.01 - EP US); **H01L 24/13** (2013.01 - EP US); **H01L 24/94** (2013.01 - EP US); **H01L 2224/0345** (2013.01 - EP); **H01L 2224/03452** (2013.01 - EP); **H01L 2224/05155** (2013.01 - EP); **H01L 2224/05171** (2013.01 - EP); **H01L 2224/05611** (2013.01 - EP US); **H01L 2224/05647** (2013.01 - EP); **H01L 2224/05655** (2013.01 - EP US); **H01L 2224/11462** (2013.01 - EP US); **H01L 2224/1147** (2013.01 - EP); **H01L 2224/11849** (2013.01 - EP); **H01L 2224/13082** (2013.01 - EP US); **H01L 2224/13083** (2013.01 - EP US); **H01L 2224/131** (2013.01 - EP US); **H01L 2224/13111** (2013.01 - EP US); **H01L 2224/13147** (2013.01 - EP US); **H01L 2224/13155** (2013.01 - EP US); **H01L 2224/94** (2013.01 - EP US); **H05K 3/3473** (2013.01 - EP US)

Citation (examination)

- JP S61117297 A 19860604 - EBARA UDYLITE KK
- US 2011189848 A1 20110804 - EWERT INGO [DE], et al
- EP 2626449 A2 20130814 - ROHM & HAAS ELECT MAT [US]

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EP3272912A1; CN110176441A; EP3702493A4; EP3002350A1; KR20160038805A; US11162182B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2868778 A2 20150506; **EP 2868778 A3 20150812**; **EP 2868778 B1 20230531**; CN 104674311 A 20150603; JP 2015092022 A 20150514; JP 6482822 B2 20190313; KR 102454558 B1 20221013; KR 20150051927 A 20150513; TW 201522720 A 20150616; TW I548781 B 20160911; US 2015122662 A1 20150507

DOCDB simple family (application)

EP 14191883 A 20141105; CN 201410858387 A 20141105; JP 2014224806 A 20141105; KR 20140153178 A 20141105; TW 103138321 A 20141105; US 201314071679 A 20131105